

**From:** Kelly Wright [kwright@sbtribes.com]  
**Sent:** Monday, November 04, 2013 11:53 AM  
**To:** Rochlin, Kevin  
**Cc:** susanh@ida.net; Virginia Monsisco; Jennings, Jannine  
**Subject:** FMC 2014 workplan November 1 Revision  
**Attachments:** FMC 2014 workplan November 1 Revision.doc

**Categories:** 11-19 to 1-10 2014

Kevin, here is another revised version of the FMC OU. I have some concerns with the requested level of effort that has been requested. I have always been under the impression that the requested level of effort was part of the quarterly report details. We have done this level of effort for the past few years. What I am particularly concerned with is the fact that we would be creating a lot more paperwork for both of us and/or possible audit findings. I have taken this request and tried to perform something similar but not to the specifics you requested.

If you still feel that this must be done to that level here, let me know so I can get working on the specifics. I understand that this work will not be covered since we don't have an existing grant. We are planning upon collecting water samples tomorrow (actually providing sample containers) to Hydrometrics for the quarterly CERCLA groundwater. I am sending an addendum to Raymond Wu to see if he can agree with what the Tribes are proposing.

The Tribes did not think that an approved QAPP would be required since one is in place for the FMC Groundwater monitoring. Only difference would be that the analyses would be performed by IAS-EnviroChem and that the Tribes would be using their own resources since it was part of an ongoing court case where the Court allowed the Tribes access. I will cc you on the letter being sent to Mr. Wu for his review.

Thanks  
Kelly

I will be using this level of effort/details for the other two components so I am including Jannine on this so I have a starting point for hers.

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# **2014 FMC Operable Unit Cooperative Agreement Work Plan**

## **Summary of the Project**

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, Section 104, the Shoshone Bannock Tribes are submitting their 2014 Cooperative Agreement Work Plan. As part of this work plan, the Tribes are putting forth an abstract of activities we are intending to undertake this fiscal year. These activities include but not limited to: providing oversight for investigations; studies; and cleanup of the FMC Operable Unit.

Activities described in the work plan will be conducted in accordance with Section 104, of CERCLA, as amended; and will be executed by the Shoshone Bannock Tribes Environmental Waste Management Program.

This narrative and scope of work includes tasks, deliverables and budget that have been defined for this program. The task specific scope of work identifies the anticipated activity and projected due dates for fiscal year 2014 (November 1, 2013 through October 30, 2014).

## **EASTERN MICHAUD FLATS**

### **Background:**

The Eastern Michaud Flats Superfund Site covers approximately 2,530 acres northwest of Pocatello, Idaho. It includes two adjacent phosphate ore processing facilities. The former FMC Corporation operated a facility from the early 1940's until December 2001. The J.R. Simplot Company Don Plant is still an active facility. EPA issued a Record of Decision (ROD) for the site in 1998. A Supplemental Remedial Investigation and Feasibility Study (RI/FS) was issued in 2010 for the FMC portion of the site, while groundwater remediation at the Simplot site is ongoing.

This site consists of three operable units: FMC OU, Simplot OU and Off-Plant property. A 1998 ROD was completed to address the EMF site. Current efforts are ongoing to design and implement these remedies and conduct supplemental investigations as needed..

In 2006 and again in June 2010, EPA issued a Unilateral Administrative Order requiring FMC to conduct removal actions to abate an imminent and substantial endangerment to the public health or welfare or the environment that may be presented by the actual or threatened release of hazardous substances at or from the RCRA pond area of this site. Phosphorus within the RCRA Units has been reacting and generating phosphine at concentrations which could pose a significant human health risk if the gas escapes to ambient air.

As for the September 2012 Interim Record of Decision Amendment, FMC will begin work through a Unilateral Administrative Order from EPA issued in 2013.

The FMC OU is the former FMC elemental phosphorus manufacturing plant, consisting of approximately 1,450 acres in southeastern Idaho, northwest of Pocatello, most of which is on the Fort Hall Indian Reservation. This land has been zoned and used for industrial purposes since the 1940s.

FMC began processing phosphate ore and manufacturing elemental phosphorus at its plant in 1949 and continued until the plant ceased operations in December 2001, and was demolished. Plant processes included the use of surface impoundments as waste ponds for ignitable-reactive elemental phosphorus and other metals-containing and gamma-emitting wastes. Many of these impoundments are RCRA regulated units. Those that are not RCRA regulated units are part of the FMC OU. FMC also used Waste Material (predominately gamma-emitting slag) as fill to grade its property and expand its operations area.

Ignitable-reactive elemental phosphorus and other hazardous substances containing wastes, including high concentrations of arsenic, along with gamma radiation are in FMC OU soils and groundwater.

The decision by EPA on the interim remedial action to be implemented at the FMC OU is embodied in an Interim Record of Decision (“Interim ROD Amendment”), executed on September 27, 2012, on which the Tribes did not concur, and on which the State concurred. The Interim ROD Amendment includes a responsiveness summary to public comments, including all formal Tribal comments. Notice of the final plan was published in accordance with Section 117(b) of CERCLA, 42 U.S.C. § 9617(b).

The FMC OU will include finalization of the Interim Record of Decision Amendment including remedial design. The Tribes plan to submit written concerns on the FMC OU Proposed Plan response to comment to ensure the administrative record accurately reflects Tribal comments and concerns.

The Tribes will be providing oversight during this entire process. Tribes are using the projected details provided by FMC for the Remedial Design Work Plan. As the activities are completed the annual Cooperative Agreement will be amended. Elements of the projected work are as follows:

## **1. Remedial Action**

### **I. Design and Construction Elements**

- Placement of evapotranspiration caps
- Placement of soil caps
- Excavation of soil from Parcel 3
- Cleaning underground concrete piping
- Installation of the groundwater extraction system

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- Installation of engineering controls
- Integration of existing RCRA pond caps with new caps

## **II. Monitoring Elements**

- Implementation and monitoring of institutional controls
- Implementation of a long-term groundwater monitoring plan
- Implementation of a gas monitoring program
- Implementation of a FMC OU-wide storm water runoff monitoring plan

## **III. Operation and Maintenance Elements**

- Implementation of an operation and maintenance plan.

### **2. Construction Quality Assurance/Quality Control Plan must:**

- (i) Identify, and describe the responsibilities of, the organizations and personnel implementing the quality assurance/quality control (“QA/QC”);
- (ii) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the QA/QC;
- (iii) Describe industry standards and technical specifications used in implementing the QA/QC;
- (iv) Describe procedures for tracking construction deficiencies from identification through corrective action;
- (v) Describe procedures for documenting all QA/QC activities; and

### **3. Emergency Response Plan (“ERP”) must include:**

- (i) Name of the person or entity responsible for responding in the event of an emergency incident;
- (ii) Plan and date(s) for meeting(s) with all appropriate authorities under the circumstances, including emergency response personnel and hospitals if relevant;
- (iii) Spill Prevention, Control, and Countermeasures (SPCC) Plan;
- (iv) Notification activities in the event of a release of hazardous substances requiring reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (“EPCRA”), 42 U.S.C. § 11004; and
- (v) Description of all necessary actions to ensure compliance with Emergency Response in the event of an occurrence during the performance of the Work that causes or threatens a release of Waste Material from the FMC OU or Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment.

**4. Field Sampling Plan and Remedial Design Quality Assurance Project Plan.** The FSP supplements the QAPP and addresses all sample collection activities. The FSP must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. Respondent shall develop the FSP

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consistent with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G-89/004 (---1988), and in accordance with Section XI (Quality Assurance, Sampling, and Data Analysis);

**5. O&M Plan.** The O&M Plan must include:

- (i) Description of and schedule for each operation task and maintenance task;
- (ii) Description of and schedule for periodic inspections of equipment and components;
- (iii) Description of O&M requirements;
- (iv) Description of instrumentation and monitoring;
- (v) Sample checklists and periodic reports;
- (vi) Description and analysis of potential operating problems, including common and/or anticipated remedies;
- (vii) Description of routine monitoring and laboratory testing;
- (viii) Description of required data collection, laboratory tests and their interpretation;
- (ix) Schedule of monitoring frequency and procedures;
- (x) Description of verification sampling procedures, if Performance Standards are exceeded during routine monitoring;
- (xi) Description of alternative operations and maintenance in case of systems failure, including:
  - (1) Alternative procedures to prevent the release or threatened release of Waste Material which may endanger public health and the environment or exceed Performance Standards;
  - (2) Analysis of vulnerability and additional resource requirements should a failure occur; and,
  - (3) Notification and reporting requirements should O&M systems fail or be in danger of imminent failure;
- (xii) Description of corrective action to be implemented in the event that Performance Standards are exceeded, and a schedule for implementing these corrective actions;
- (xiii) Description of monitoring equipment and monitoring components, including identifying information, maintenance requirements and schedule, and replacement requirements and schedule; and
- (xiv) Description of records and reports that will be generated during O&M, such as daily operating logs, laboratory records, records of operating costs, reports regarding emergencies, personnel and maintenance records; and provisions for preparation and submission of monthly and annual O&M summary reports to EPA.

**6. Performance Standards Verification Plan (“PSVP”).** The PSVP must include the following elements:

- (i) A description of each of the Performance Standards required by the Interim ROD Amendment;
- (ii) A description of plans to ensure that each Performance Standard will be met; and
- (iii) A description of activities to be performed to determine whether performance standards have been met.

**7.0 Transportation and Off-Site Disposal Plan (“TODP”).** The TODP must include:

- (i) Proposed locations and routes for off-site shipment of waste material;
- (ii) Identification of communities affected by shipment of waste material; and
- (iii) Description of plans to minimize impacts on affected communities.

**8.0 Provisions for continuing groundwater monitoring, sampling, analysis and reporting.** The Groundwater Monitoring Plan will include but not limited to a schedule for completion of the Remedial Action Work Plan.

## **9.0 Performance Testing**

Review the Performance Testing Work Plan (“PTWP”) and observe the testing described in the Work Plan(s) which are as follows:

- **Groundwater Remedy Water Treatment Testing**

This will be generating a report that will include an evaluation of each technology's effectiveness, implementability, and actual results as compared with predicted results. The report shall provide recommendations for implementation of technologies and design criteria for those technologies recommended.

- **Gamma Cap Thickness Effectiveness Test**

The purposes of the Gamma Cap Thickness Effectiveness Test will be to:

- a. Determine whether the one foot of native soil cap or “gamma” cap meets the external gamma radiation Performance Standard (and remedial action objective) in the Interim ROD Amendment, or whether more material is required,
  - b. Develop construction QA/QC methods to demonstrate achievement of the Performance Standard.
  - c. Prepare a Performance Test (“PT”) Evaluation Report.
- **Preliminary (30%) RD.** This plan will at a minimum include:
    - a. Design analysis, including assumptions and parameters, design restrictions, design calculations, process performance criteria, appropriate unit processes for the treatment train, and expected removal or treatment efficiencies for both the process and waste (concentration and volume);
    - b. Preliminary drawings and specifications;
    - c. Preliminary description of access requirements and proposed easements;
    - d. Preliminary O&M Plan and O&M Manual;

- e. A description of how the Remedial Action will be implemented in a manner that minimizes environmental impacts consistent with EPA's *Principles for Greener Cleanups*, OSWER (Aug. 2009) and Region 10's Clean and Green Policy (Aug. 2009); and
- f. Preliminary RA Schedule.
- **Intermediate (60%) RD** - If Respondent determines during RD planning that a 60% Intermediate RD is necessary, we will need to review and comment on the Intermediate (60%) RD.

- **Final RD**

The Pre-final RD must include, at a minimum:

- a. Complete set of construction drawings and specifications that are:
  - Certified by a Professional Engineer registered in the State;
  - Suitable for bid advertisement; and
  - Follow the Construction Specifications Institute's Master Format 2012;
- b. Survey and engineering drawings showing existing FMC OU elements, conditions, borders, and easements;
- c. Pre-Final (95%) versions of the same elements and deliverables as are required for the previously submitted (Preliminary and Intermediate, if developed) RD;
- d. Specification for photographic documentation of the RA;
- e. Description of Respondent's method for selecting the construction contractor(s);

- **Remedial Action.** The Remedial Action Work Plan shall include the following:

- a. Schedule for completion of the Remedial Action;
- b. Method for selection of the contractor;
- c. Schedule for developing and submitting other required Remedial Action plans;
- d. Final CERCLA Groundwater Monitoring Plan;
- e. Methods for satisfying access requirements;
- f. Methodology for implementing the Operation and Maintenance Plan;
- g. Methodology for implementing the Emergency Response Plan,;
- h. Tentative formulation of the Remedial Action team;
- i. Construction Quality Assurance Plan (by the construction contractor);
- j. Performance Standards Verification Plan; and
- k. Procedures and plans for the decontamination of equipment and the disposal of contaminated materials.

- **Final CERCLA Groundwater Monitoring Plan** will provide for the following:

- a. EPA Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems (EPA 600/R-08/003, 2008) will be used to evaluate the effectiveness of the Pump and Treat System.

- b. Implementation of the Final CERCLA Groundwater Monitoring Plan will be coordinated with Respondent's RCRA and Calciner Pond remedy groundwater monitoring programs.
- c. Once installation of the groundwater extraction system has been completed and the annual average pumping rate has been achieved, an addenda to the plan will specify the appropriate monitoring locations at the FMC OU and Off-Plant OU to measure progress toward achieving the Performance Standards for the groundwater extraction and treatment system, including the types of statistical tools to be used to evaluate the groundwater data, and the system's effectiveness.

Based on earlier Government to Government Consultation, EPA committed to providing oversight during all on site work Tribes will be providing oversight of work at the FMC site also.

Staff and contract employees will work on all tasks within the FMC OU of EMF site including conducting sampling, review documents, communicate issues with public and policy makers, schedule meetings, attend meetings and other tasks in compliance with this workplan.

#### **Task 1: Remedial Design, Remedial Action and Other Documents.**

Assist with components identified above for Remedial Design/ Remedial Actions. In this process, the Tribes will be reviewing, commenting and participating in oversight of the remedial design and construction activities.

#### **Task 2: Public Involvement – Communications.**

Provide updates to public, policy makers, and membership on current progress, issues and respond to questions, concerns if any.

These numbers are based on expectations and level of effort for each task. Level of effort includes coordination with policy leaders on a regular basis and with departments and community meetings as requested.

Fort Hall Reservation is comprised of 5 Districts. Regularly scheduled monthly meetings have been established to allow tribal members an opportunity for updates regarding environmental and other issues impacting their resources. Attendance at these meetings requires an added level of effort and resources for staff and contract employees. Information on meetings attended, information provided is provided to EPA in quarterly reporting.

#### **Task 3: UAO - All Ponds**

RCRA ponds at the FMC OU are generating toxic gases that require treatment. Tribes will continue to review, comment and participate in activities associated with this UAO and work with EPA to develop the Post Closure Monitoring Plan. Current UAO is written to address the gas generation but eventually source control should be utilized which could be part of the Post Closure Monitoring Plan.

Labor hours are based on historical details from the past 7 years which the UAO's have been in effect and include monthly calls, weekly reporting and other notification processes. Level of effort requires participation in calls, review of data reports communication internally and coordination with policy leaders. Effort generally involves 8 to 12 hours. Post Closure Monitoring Plan has been reviewed and revisions are needed to address many of the concerns identified over the past 7 years. This will involve another round of reviews and comment/resolution. It is not unrealistic for the Tribes to expect at least 40 hours for this process.

**Task 4: Monitoring - Groundwater, Leachate Collection Water and Phosphine Monitoring:**

Tribes have requested to be onsite during all remedial activities including but not limited to: reviewing, completing independent monitoring, and oversight.

Tribes want to ensure the remedial actions proposed and undertaken are protective of Tribal reservation resources including human health and the environment. To this end the Tribes propose completing sampling of groundwater and surface water to truth the models and assumptions regarding groundwater travel. The Tribes request periodic split sampling for all chemicals of concern to ensure assumptions made in reducing the number of analytes remains valid and to protect their resources. At a minimum, Tribes will sample select wells once per year. Analyses will include total metals and radionuclides including gross alpha, gross beta, uranium 238, radium 226, radium 228, Phase II drinking water metals, phase IV drinking water metals, nitrate, total ammonia, total phosphate, orthophosphate, fluoride, potassium, and sulfate.

IAS-Environ Chem is the laboratory the Tribes contract with for analytical work and are expected to be used in the future. Tribes request a minimum of 10 samples be collected by Hydrometrics, who already have an approved QAPP and have the full list of original chemicals of concern. Costs associated with each scheduled sample are estimated at, each \$1,032.

**Task 5: Project Management.**

Quarterly reporting (1/31, 4/30, 7/31, 10/31.); budget and resource management planning and coordination. Compiling information requires approximately 6 to 8 hours per report.

Estimates based on expectations for each task and compared to historical labor with comparable activities.

<b>SBT Estimated Hours – East Michaud Flats - FMC OU</b>		<b>Contractor Hours</b>
Task 1: Remedial Design/ Remedial Action	180	100
Task 2: Public Involvement/ Communications	124	60
Task 3: UAO's	240	120
Task 4: Monitoring Oversight	240	120
Task 5: Project Management	80	0
<b>Total</b>	<b>848</b>	<b>400</b>

<b>SBT Estimated Costs – Eastern Michaud Flats - FMC OU</b>	
Personnel	\$23,238.16
Fringe Benefits	\$6,138.13
Travel	\$1,991
Supplies	\$736.38
Contractual - Contractor (400 hours at \$87.50/hour)	\$35,000
Contractual Laboratory (10 samples at \$1,032 per sample)	\$10,320
Indirect Charges	\$7,931.60
<b>Total</b>	<b>\$85,355.27</b>